



Pine Bend Refinery

ENVIRONMENTAL DEPARTMENT

P.O. Box 64596

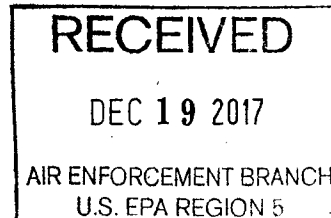
Saint Paul, Minnesota 55164

651.437.0700

December 7, 2017

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Air Quality Compliance Tracking Coordinator
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194



RE: 40 CFR 60 Subpart Kb Update, November 2017

To whom it may concern:

The attached tables provide updates on NSPS Kb tank inspections at the Flint Hills Resources Pine Bend Refinery in Rosemount, Minnesota to satisfy the notification requirements in 40 CFR § 60.113b(a)(5) and 40 CFR § 60.113b(b)(5) and CFR § 60.113b(b)(6)(ii).

Pursuant to 40 CFR § 60.115b(a)(3), the following tanks did not meet specifications for the annual internal floating roof tank seal inspection: **No IFR tanks failed to meet inspection criteria in the month of November.**

Pursuant to 40 CFR § 60.115b(a)(4), the following tanks did not meet specifications for the internal floating roof tank seal inspection: **No IFR tanks failed to meet inspection criteria in the month of November.**

Pursuant to 40 CFR § 60.115b(b)(4), the following tanks did not meet specifications for external-floating roof tank seal inspections: **94B7A and 94B7B had secondary seal gap measurements completed in the month of November. They are both tanks/basins subject to NESHAP FF following the requirements of Kb. 94B7A secondary seal exceeded the Kb gap allowances, and had a damaged mixer boot requiring repair. 94B7B secondary seal exceeded the Kb gap allowances. FHR PB has entered work orders to repair the secondary seals of 94B7A and 94B7B within 45 days (WO#494764 and WO#494768), and also has a work order to repair the worn mixer boot on 94B7A within 15 days to meet NESHAP FF repair requirements (WO#494761).**

Additionally, please note that the 2018 Kb Inspection Schedule is attached to this letter.

If you have any questions regarding this letter, or if you would like to be present at any of the planned tank inspections, please contact me at (651) 438-7769.

Sincerely,

Tom Lawrence
Tanks Program Owner

Cc: Dan Dietrich, MPCA
✓ Director, Air and Radiation Division, US EPA Region V

2017 PLANNED Kb-RELATED ACTIVITY

Flint Hills Resources Pine Bend Refinery

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE	FOLLOW-UP FROM INSPECTION
086TK002	EFR	5 year primary inspection and seal gap measurement	Completed 4/27/2015	Scheduled 4/2020	
086TK003	EFR	5 year primary inspection and seal gap measurement	Completed 4/26/2016	Scheduled 4/2021	
086TK004	EFR	5 year primary inspection and seal gap measurement	Completed 4/23/2013	Scheduled 4/2018	
086TK006	EFR	5 year primary inspection and seal gap measurement	Completed 3/4/2014	Scheduled 3/2019	
086TK007	EFR	5 year primary inspection and seal gap measurement	Completed 5/21/2014	Scheduled 5/2019	
086TK061	EFR	5 year primary inspection and seal gap measurement	Completed 4/11/2013	Scheduled 4/2018	
086TK062	EFR	5 year primary inspection and seal gap measurement	Completed 4/2/2014	Scheduled 4/2019	
086TK066	EFR	5 year primary inspection and seal gap measurement	Completed 3/5/2014	Scheduled 3/2019	
086TK068	EFR	5 year primary inspection and seal gap measurement	Completed 4/2/2014	Scheduled 4/2019	
086TK083	EFR	5 year primary inspection and seal gap measurement	Completed 4/10/2014	Scheduled 4/2019	
086TK087	EFR	5 year primary inspection and seal gap measurement	Completed 4/10/2013	Scheduled 4/2018	
086TK088	EFR	5 year primary inspection and seal gap measurement	Completed 4/24/2013	Scheduled 4/2018	
086TK150	EFR	5 year primary inspection and seal gap measurement	Completed 4/15/2014	Scheduled 4/2019	
086TK151	EFR	5 year primary inspection and seal gap measurement	Completed 4/4/2013	Scheduled 4/2018	
086TK152	EFR	5 year primary inspection and seal gap measurement	Completed 4/13/2015	Scheduled 4/2020	
94V49	EFR	5 year primary inspection and seal gap measurement	Completed 10/29/2013	Scheduled 10/2018	
094B-7A East	EFR	Annual visual inspection and secondary seal gap measurement	Completed 11/9/2016	Completed 11/21/2017	Repairs required/scheduled WO#494764 WO#494761
094B-7A East	EFR	5 year primary inspection and seal gap measurement	Completed 11/9/2016	Scheduled 11/2021	
094B-7B West	EFR	Annual visual inspection and secondary seal gap measurement	Completed 11/9/2016	Scheduled 11/21/2017	Repairs required/scheduled WO#494768
094B-7B West	EFR	5 year primary inspection and seal gap measurement	Completed 11/9/2016	Scheduled 11/2021	
94TK064	EFR	Initial 5 year primary inspection and seal gap measurement	New seal installation during TA	Scheduled 3/2018	
94TK064	EFR	Initial Annual visual inspection and secondary seal gap measurement	New seal installation during TA	Scheduled 3/2018	

Note: Tank 94TK64 is currently in turnaround and will have new seals installed. Tentative schedule for refill is 3/2018 and the primary and secondary seal gaps will be measured within 60-days of tank filling.

2017 Current Kb-related Activity

Flint Hills Resources

Pine Bend Facility

Note: Notifications are reflected for Internal and External Floating Roofs.

TANK	ROOF TYPE	Date of 30-day notification	ANTICIPATED FILL DATE
94TK64	EFR	6/9/2017	3/1/2018 (Updated to reflect current anticipated refill schedule)
88TK523	IFR	10/6/2017	1/1/2018 (Updated to reflect current anticipated refill schedule)
86TK18	IFR	6/9/2017	2/1/2018 (Updated to reflect current anticipated refill schedule)

FHR is supplying this information to meet the refill notification obligations of 40 CFR § 60.113b. FHR will include tanks on this list as refill dates become known and will provide any necessary updates in subsequent monthly reports.

JHB
11/27/17

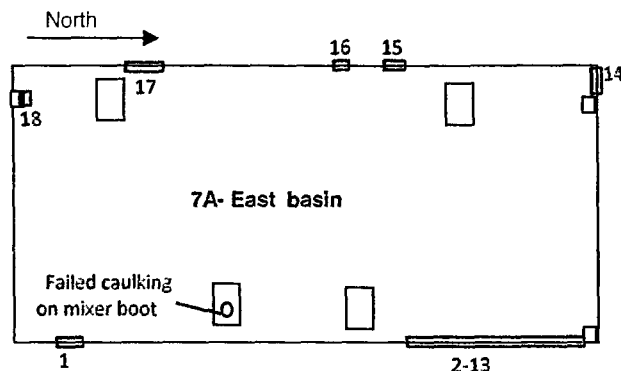
PETROLEUM OR VOLATILE LIQUID STORAGE VESSEL EXTERNAL FLOATING ROOF SECONDARY SEAL GAP MAXIMUM WIDTH AND ACCUMULATED GAP AREA TEST RESULTS

Subpart Kb: For Vessels With a Capacity Greater than 75 m³
and
Construction, Reconstruction or Modification after 7/23/84

FACILITY NAME Flint Hills Resources
VESSEL NO. 94B-7A
VESSEL CAPACITY _____
VESSEL CONSTRUCTION DATE 1/1/1976

TEST DATE 11/21/2017
INSPECTOR Jordan Henderson

PRIMARY SEAL TYPE:
☒ Liquid-Mounted
☐ Vapor-Mounted
☐ Metallic Shoe



METALLIC SHOE SEAL:
☐ Yes
☐ No
☒ Does Not Apply

One end is submerged into stored liquid

Other end extends a minimum of vertical distance of 61 cm (24 in.) above liquid
☐ Yes
☐ No
☒ Does Not Apply

SECONDARY SEAL

[Metallic Shoe
or
Liquid-Mounted]

[Vapor-Mounted]

Accumulated Gap Area	Allowable
<u>37.2961 cm²/m</u>	21.2
<u>1.761935 in²/ft</u> Fail	1

Accumulated Gap Area	Allowable
<u>NA cm²/m</u>	21.2
<u>NA in²/ft</u>	1

Maximum Gap Width	Allowable
<u>2.54 cm</u>	1.27
<u>1 in</u> Fail	0.5

Maximum Gap Width	Allowable
<u>NA cm</u>	1.27
<u>NA in</u>	0.5

Observed Number of Holes, Tears or Openings	Allowable
Shoe <u>NA</u>	0
Seal Fabric <u>1</u>	0
Seal Envelope <u>1</u>	0

Observed Number of Holes, Tears or Openings	Allowable
Shoe <u>NA</u>	0
Seal Fabric <u>NA</u>	0
Seal Envelope <u>NA</u>	0

COMMENTS:

Basin covers operating as designed. The secondary seal gaps are outside allowable limits for maximum gap width and accumulated gap. WO# 494764 was created to have seal adjusted/repared within 45 days. Due on or before 1/4/2018. One mixer boot was found to be weathered and holed through. WO#494761 was created to repair/replace mixer boot within 15 days. Due on or before 12/5/2017.

SEAL GAP AREA FIELD DATA AND CALCULATION SUMMARY

Subpart Kb: For Vessels With a Capacity Greater than 75 m³
and
Construction, Reconstruction or Modification after 7/23/84

VESSEL NO. 94B-7A DATE 11/21/2017
VESSEL DIAMETER 48.52179214 m INSPECTOR Jordan Henderson
Relative Diameter 159.2 ft Primary ☐
SEAL: Secondary ☒
500 ft perimeter / 3.1416 = 159.2

Gap No.	Gap Width		Gap Circumferential Length		Total Gap Surface Area	
	>1/8 in. dia. (in.)	>0.32 cm dia. (cm)	(in.)	(cm)	(in ²)	(cm ²)
1	0.13	0.3302	100	254	13	83.8708
2	0.25	0.635	80	203.2	20	129.032
3	0.375	0.9525	30	76.2	11.25	72.5805
4	0.5	1.27	30	76.2	15	96.774
5	0.25	0.635	20	50.8	5	32.258
6	0.25	0.635	20	50.8	5	32.258
7	0.375	0.9525	50	127	18.75	120.9675
8	0.25	0.635	20	50.8	5	32.258
9	0.5	1.27	20	50.8	10	64.516
10	1	2.54	20	50.8	20	129.032
11	0.625	1.5875	10	25.4	6.25	40.3225
12	0.5	1.27	10	25.4	5	32.258
13	0.375	0.9525	30	76.2	11.25	72.5805
14	0.375	0.9525	36	91.44	13.5	87.0966
15	0.25	0.635	40	101.6	10	64.516
16	0.25	0.635	50	127	12.5	80.645
17	1	2.54	90	228.6	90	580.644
18	0.375	0.9525	24	60.96	9	58.0644
19		0		0	0	0
20		0		0	0	0
21		0		0	0	0
22		0		0	0	0
23		0		0	0	0
24		0		0	0	0
25		0		0	0	0
26		0		0	0	0
27		0		0	0	0
28		0		0	0	0
29		0		0	0	0
30		0		0	0	0
31		0		0	0	0
32		0		0	0	0
33		0		0	0	0
34		0		0	0	0
35		0		0	0	0
36		0		0	0	0

280.5 1809.674 TOTAL

Maximum Gap Width = 2.54 cm
1 in

Accumulated Gap Area Per Meter of Tank Diameter:

Total Accumulated Gap Area, cm²
Diameter of the Vessel, m = 37.296104 cm²/m

Accumulated Gap Area Per Foot of Tank Diameter:

Total Accumulated Gap Area, in²
Diameter of the Vessel, ft = 1.7619347 in²/ft

Inspector: Jordan Henderson

Report Date: 11/21/2017

JNB
11/27/17

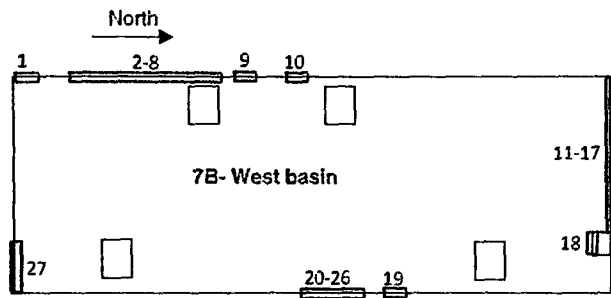
PETROLEUM OR VOLATILE LIQUID STORAGE VESSEL EXTERNAL FLOATING ROOF SECONDARY SEAL GAP MAXIMUM WIDTH AND ACCUMULATED GAP AREA TEST RESULTS

Subpart Kb: For Vessels With a Capacity Greater than 75 m³
and
Construction, Reconstruction or Modification after 7/23/84

FACILITY NAME Flint Hills Resources
VESSEL NO. 94B-7B
VESSEL CAPACITY _____
VESSEL CONSTRUCTION DATE 1/1/1976

TEST DATE 11/21/2017
INSPECTOR Jordan Henderson

PRIMARY SEAL TYPE: ☒ Liquid-Mounted
☐ Vapor-Mounted
☐ Metallic Shoe



METALLIC SHOE SEAL: ☐ Yes
☐ No
☒ Does Not Apply
One end is submerged into stored liquid
Other end extends a minimum of vertical distance of 61 cm (24 in.) above liquid ☐ Yes
☐ No
☒ Does Not Apply

SECONDARY SEAL

[Metallic Shoe
or
Liquid-Mounted]

[Vapor-Mounted]

Accumulated Gap Area	Allowable
137.9564 cm ² /m	21.2
6.517305 in ² /ft Fail	1
Maximum Gap Width	Allowable
2.54 cm	1.27
1 in Fail	0.5
Observed Number of Holes, Tears or Openings	
	Allowable
Shoe NA	0
Seal Fabric 0	0
Seal Envelope 1	0

Accumulated Gap Area	Allowable
NA cm ² /m	21.2
NA in ² /ft	1
Maximum Gap Width	Allowable
NA cm	1.27
NA in	0.5
Observed Number of Holes, Tears or Openings	
	Allowable
Shoe NA	0
Seal Fabric NA	0
Seal Envelope NA	0

COMMENTS:

Basin covers operating as designed. The secondary seal gaps are outside allowable limits for maximum gap width and accumulative gap length. WO#494768 was created to have the seal adjusted/repared within 45 days. Due on or before 1/4/2018.

SEAL GAP AREA FIELD DATA AND CALCULATION SUMMARY

Subpart Kb: For Vessels With a Capacity Greater than 75 m³
and
Construction, Reconstruction or Modification after 7/23/84

VESSEL NO. 94B-7B DATE 11/21/2017
VESSEL DIAMETER 48.52179214 m INSPECTOR Jordan Henderson
Relative Diameter 159.2 ft

SEAL: Primary ☐

500 ft perimeter / 3.1416 = 159.2

Secondary ☒

Gap No.	Gap Width		Gap Circumferential Length		Total Gap Surface Area	
	>1/8 in. dia. (in.)	>0.32 cm dia (cm)	(in.)	(cm)	(in ²)	(cm ²)
1	0.25	0.635	40	101.6	10	64.516
2	0.25	0.635	120	304.8	30	193.548
3	0.5	1.27	240	609.6	120	774.192
4	0.375	0.9525	60	152.4	22.5	145.161
5	0.25	0.635	58	147.32	14.5	93.5482
6	0.375	0.9525	20	50.8	7.5	48.387
7	0.625	1.5875	75	190.5	46.875	302.4188
8	0.25	0.635	30	76.2	7.5	48.387
9	0.25	0.635	70	177.8	17.5	112.903
10	0.25	0.635	60	152.4	15	96.774
11	0.13	0.3302	36	91.44	4.68	30.19349
12	0.25	0.635	50	127	12.5	80.645
13	0.5	1.27	70	177.8	35	225.806
14	0.625	1.5875	180	457.2	112.5	725.805
15	1	2.54	300	762	300	1935.48
16	0.625	1.5875	96	243.84	60	387.096
17	0.25	0.635	36	91.44	9	58.0644
18	0.375	0.9525	48	121.92	18	116.1288
19	0.25	0.635	160	406.4	40	258.064
20	0.5	1.27	24	60.96	12	77.4192
21	0.375	0.9525	12	30.48	4.5	29.0322
22	0.75	1.905	36	91.44	27	174.1932
23	0.5	1.27	34	86.36	17	109.6772
24	0.25	0.635	12	30.48	3	19.3548
25	0.375	0.9525	36	91.44	13.5	87.0966
26	0.25	0.635	30	76.2	7.5	48.387
27	0.5	1.27	140	355.6	70	451.612
28	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	0	0	0	0	0
31	0	0	0	0	0	0
					1037.555	6693.89 TOTAL

Maximum Gap Width = 2.54 cm
= 1 in

Accumulated Gap Area Per Meter of Tank Diameter:

Total Accumulated Gap Area, cm² = 137.9564 cm²/m
Diameter of the Vessel, m

Accumulated Gap Area Per Foot of Tank Diameter:

Total Accumulated Gap Area, in² = 6.517305 in²/ft
Diameter of the Vessel, ft

Inspector: Jordan Henderson

Report Date: 11/21/2017

2018 PLANNED Kb-RELATED ACTIVITY

Flint Hills Resources Pine Bend Refinery

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE
088TK523	IFR	Annual visual inspection	Completed 2/8/2017	Scheduled 2/2018
094B-7A East	EFR	Annual visual inspection and secondary seal gap measurement	Completed 2/13/2017	Scheduled 2/2018
094B-7B West	EFR	Annual visual inspection and secondary seal gap measurement	Completed 2/13/2017	Scheduled 2/2018
086TK011	IFR	Annual visual inspection	Completed 3/27/2017	Scheduled 3/2018
086TK012	IFR	Annual visual inspection	Completed 3/20/2017	Scheduled 3/2018
086TK014	IFR	Annual visual inspection	Completed 3/13/2017	Scheduled 3/2018
086TK016	IFR	Annual visual inspection	Completed 3/13/2017	Scheduled 3/2018
086TK023	IFR	Annual visual inspection	Completed 3/08/2017	Scheduled 3/2018
086TK028	IFR	Annual visual inspection	Completed 3/07/2017	Scheduled 3/2018
086TK048	IFR	Annual visual inspection	Completed 3/08/2017	Scheduled 3/2018
094TK063	EFR	Annual visual inspection and secondary seal gap measurement	Completed 3/14/2017	Scheduled 3/2018
094TK063	EFR	5 year primary inspection and seal gap measurement	Completed 3/14/2017	Scheduled 3/2022
086TK161	IFR	Annual visual inspection	Completed 3/28/2017	Scheduled 3/2018
094TK205	IFR	Annual visual inspection	Completed 3/21/2017	Scheduled 3/2018
094TK206	IFR	Annual visual inspection	Completed 3/21/2017	Scheduled 3/2018
088TK522	IFR	Annual visual inspection	Completed 3/21/2017	Scheduled 3/2018
086TK001	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/06/2017	Scheduled 4/2018
086TK001	EFR	5 year primary inspection and seal gap measurement	Completed 4/06/2017	Scheduled 4/2022
086TK002	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/05/2017	Scheduled 4/2018
086TK002	EFR	5 year primary inspection and seal gap measurement	4/27/2015	4/2020
086TK003	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/06/2017	Scheduled 4/2018
086TK003	EFR	5 year primary inspection and seal gap measurement	Completed 4/26/2016	Scheduled 4/2021

2018 PLANNED Kb-RELATED ACTIVITY

Flint Hills Resources Pine Bend Refinery

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE
086TK004	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/27/2017	Scheduled 4/2018
086TK004	EFR	5 year primary inspection and seal gap measurement	Completed 4/23/2013	Scheduled 4/2018
086TK005	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/12/2017	Scheduled 4/2018
086TK005	EFR	5 year primary inspection and seal gap measurement	Completed 4/12/2017	Scheduled 4/2022
086TK006	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/25/2017	Scheduled 4/2018
086TK006	EFR	5 year primary inspection and seal gap measurement	Completed 3/4/2014	Scheduled 4/2018
086TK007	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/12/2017	Scheduled 4/2018
086TK007	EFR	5 year primary inspection and seal gap measurement	Completed 5/21/2014	Scheduled 5/2019
086TK061	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/03/2017	Scheduled 4/2018
086TK061	EFR	5 year primary inspection and seal gap measurement	Completed 4/11/2013	Scheduled 4/2018
086TK062	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/03/2017	Scheduled 4/2018
086TK062	EFR	5 year primary inspection and seal gap measurement	Completed 4/2/2014	Scheduled 4/2019
086TK066	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/05/2017	Scheduled 4/2018
086TK066	EFR	5 year primary inspection and seal gap measurement	Completed 3/5/2014	Scheduled 4/2018
086TK068	EFR	Annual visual inspection and secondary seal gap measurement	Completed 10/2/2017	Scheduled 4/2018
086TK068	EFR	5 year primary inspection and seal gap measurement	Completed 10/2/2017	Scheduled 10/2022
086TK080	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/05/2017	Scheduled 4/2018
086TK080	EFR	5 year primary inspection and seal gap measurement	Completed 4/05/2017	Scheduled 4/2022
086TK083	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/05/2017	Scheduled 4/2018
086TK083	EFR	5 year primary inspection and seal gap measurement	Completed 4/10/2014	Scheduled 4/2019
086TK087	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/05/2017	Scheduled 4/2018
086TK087	EFR	5 year primary inspection and seal gap measurement	Completed 4/10/2013	Scheduled 4/2018
086TK088	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/06/2017	Scheduled 4/2018
086TK088	EFR	5 year primary inspection and seal gap measurement	Completed 4/24/2013	Scheduled 4/2018
086TK150	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/03/2017	Scheduled 4/2018
086TK150	EFR	5 year primary inspection and seal gap measurement	Completed 4/15/2014	Scheduled 4/2019

2018 PLANNED Kb-RELATED ACTIVITY

Flint Hills Resources Pine Bend Refinery

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE
086TK151	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/03/2017	Scheduled 4/2018
086TK151	EFR	5 year primary inspection and seal gap measurement	Completed 4/4/2013	Scheduled 4/2018
086TK152	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/03/2017	Scheduled 4/2018
086TK152	EFR	5 year primary inspection and seal gap measurement	Completed 4/13/2015	Scheduled 4/2020
086TK160	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/27/2017	Scheduled 4/2018
086TK160	EFR	5 year primary inspection and seal gap measurement	Completed 3/29/2017	Scheduled 3/2022
049TK586	EFR	Annual visual inspection and secondary seal gap measurement	Completed 8/7/17	Scheduled 8/2018
049TK586	EFR	5 year primary inspection and seal gap measurement	Completed 8/7/2017	Scheduled 8/2022
049TK587	EFR	Annual visual inspection and secondary seal gap measurement	Completed 7/31/2017	Scheduled 7/2018
049TK587	EFR	5 year primary inspection and seal gap measurement	Completed 7/31/2017	Scheduled 7/2022
094B-7A East	EFR	Annual visual inspection and secondary seal gap measurement	Completed 5/24/2017	Scheduled 5/2018
094B-7B West	EFR	Annual visual inspection and secondary seal gap measurement	Completed 5/24/2017	Scheduled 5/2018
086TK015	IFR	Annual visual inspection	Completed 6/20/2017	Scheduled 6/2018
086TK017	IFR	Annual visual inspection	Completed 6/20/2017	Scheduled 6/2018
086TK018	IFR	Annual visual inspection	Completed 6/20/2017	Scheduled 6/2018
086TK026	IFR	Annual visual inspection	Completed 6/20/2017	Scheduled 6/2018
086TK027	IFR	Annual visual inspection	Completed 6/20/2017	Scheduled 6/2018
094TK064	EFR	Initial anual visual inspection and secondary seal gap measurement	New seal installed during TA	Scheduled 3/2018
094TK064	EFR	Initial 5 year primary inspection and seal gap measurement	New seal installed during TA	Scheduled 3/2018
086TK067	IFR	Annual visual inspection	Completed 6/15/2017	Scheduled 6/2018
086TK082	IFR	Annual visual inspection	Completed 6/21/2017	Scheduled 6/2018
086TK084	IFR	Annual visual inspection	Completed 6/15/2017	Scheduled 6/2018
086TK085	IFR	Annual visual inspection	Completed 6/21/2017	Scheduled 6/2018
086TK010	IFR	Annual visual inspection	Completed 7/6/2017	Scheduled 7/2018
086TK013	IFR	Annual visual inspection	Completed 7/6/2017	Scheduled 7/2018

2018 PLANNED Kb-RELATED ACTIVITY

Flint Hills Resources Pine Bend Refinery

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE
086TK024	IFR	Annual visual inspection	Completed 7/5/2017	Scheduled 7/2018
086TK025	IFR	Annual visual inspection	Completed 7/5/2017	Scheduled 7/2018
086TK049	IFR	Annual visual inspection	Completed 7/6/2017	Scheduled 7/2018
086TK68	EFR	Annual visual inspection and secondary seal gap measurement	Completed 10/2/2017	Scheduled 4/2018
086TK68	EFR	5 year primary inspection and seal gap measurement	Completed 10/2/2017	Scheduled 10/2022
086TK065	IFR	Annual visual inspection	Completed 8/17/17	Scheduled 8/2018
086TK086	IFR	Annual visual inspection	Completed 8/17/17	Scheduled 8/2018
094B-7A East	EFR	Annual visual inspection and secondary seal gap measurement	Completed 8/22/2017	Scheduled 8/2018
094B-7B West	EFR	Annual visual inspection and secondary seal gap measurement	Completed 8/22/2017	Scheduled 8/2018
94V49	EFR	Annual visual inspection and secondary seal gap measurement	Completed 10/18/2017	Scheduled 10/2018
94V49	EFR	5 year primary inspection and seal gap measurement	Completed 10/29/2013	Scheduled 10/2018
094B-7A East	EFR	Annual visual inspection and secondary seal gap measurement	Completed 11/21/2017	Scheduled 11/2018
094B-7A East	EFR	5 year primary inspection and seal gap measurement	Completed 11/9/2016	Scheduled 11/2021
094B-7B West	EFR	Annual visual inspection and secondary seal gap measurement	Completed 11/21/2017	Scheduled 11/2018
094B-7B West	EFR	5 year primary inspection and seal gap measurement	Completed 11/9/2016	Scheduled 11/2021

215 South Cascade Street
PO Box 496
Fergus Falls, Minnesota 56538-0496
218 739-8200
www.otpco.com



December 21, 2017

Minnesota Pollution Control Agency
Air Quality Compliance Tracking Coordinator
Industrial Unit
520 Lafayette Road North
St. Paul, MN 55155-4194

To Whom It May Concern:

SUBJECT: HOOT LAKE PLANT – UNITS 3
MERCURY EMISSIONS PERFORMANCE TEST PLAN AND
NOTIFICATION OF INTENT TO CONDUCT A PERFORMANCE TEST
PERMIT NO. 11100002-005

Enclosed is a mercury emissions test plan for Hoot Lake Plant Units 3. The purpose of this performance testing is to determine mercury emission levels at Hoot Lake Plant Unit 3 to satisfy both federal and state rules. Specifically, this test will demonstrate continued compliance with the Low Emitting EGU (LEE) requirements of 40 CFR Part 63 Subpart UUUUU (the Mercury and Air Toxics Standards Rule), and the test will also satisfy Minnesota Rule 7011.0561 Subpart 4.B, Subpart 5.B, and Subpart 9.

Please note that this testing will be over a 30 boiler operating day period under all process operating conditions, as required by § 63.10005(h)(3) and Minn. R. 7011.0561 Subp. 5(B)(1).

The test is scheduled to begin on January 10, 2018 for Unit 3. We regret that this submittal falls outside of the 30 day window in accordance with the filing and content requirements in Minn R. 7017.2030, subparts 1-3, and the notification requirement of § 63.10030(d).

Should you have any questions on the enclosed, please contact Alex Stalboerger at 218.739.8377 or ajstalboerger@otpco.com. We will also be in contact to set up a pre-test meeting as required by 7017.2030, subpart 4.

Sincerely,

A handwritten signature in black ink that reads "Mark Thoma".

Mark Thoma
Manager, Environmental Services

Enclosure

C: Mr. George Czerniak -- EPA Region V w/o